February 2015

Wolters Kluwer Law & Business White Paper

How are States Using Prescription Monitoring Databases to Protect Public Health?

Inside

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Executive Summary

Over the last two decades, nearly every state has established a database to track prescriptions for controlled substances. These prescription monitoring databases (PMDB) serve several purposes: (1) to help physicians and other practitioners spot patients who may be "doctor shopping" to obtain drugs for abuse or diversion; (2) to find aberrant patterns of prescribing that enable abuse and contribute to addiction; and (3) to help law enforcement detect and prosecute criminal activity. These purposes often conflict, and states that invest in prescription monitoring programs (PMPs) must balance patients' rights of privacy, the need for cooperation and compliance by pharmacists and health care practitioners, the prevention of overdoses, and the preservation of access to the drugs for patients who need them against one another as well as the opportunities for professional regulation and law enforcement.

Because states have different priorities and perceptions of the extent of prescription drug abuse, they resolved these conflicts differently, and these differences are reflected in the PMDBs they establish. This White Paper will examine the features of states' PMPs, the choices they reflect, and the factors that contribute to their effectiveness.

What is a Prescription Monitoring Database?

The key feature of PMDBs is that pharmacists or others who dispense controlled drugs (dispensers) report each prescription they fill to a central repository. The reports must include the:

- drug, national drug code (NDC) number, dose, and the number of units dispensed;
- patient's identity, including date of birth, gender, and address;
- identity of the prescriber, including his or her Drug Enforcement Administration (DEA) registration number;
- date, time, and place where the drug was dispensed; and
- identity of the person who received the medication, if it was someone other than the patient.

In some states, the report must include additional information, such as the number of refills permitted, whether the prescription was new or a refill, and/or the source of payment.

The information is made available to dispensers and physicians or other practitioners (prescribers) to check on a patient's history when a patient seeks treatment or fills a prescription. The prescriber may use the information

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to adjust the treatment plan, follow the patient more closely, counsel with the patient, or take other action consistent with professional standards. The dispenser may refuse to fill the prescription or take other action if the information available shows that the patient has filled an unusually high number of prescriptions, especially if they are written by several prescribers.

Evolution of PMPs

Some states have attempted to track prescriptions for Schedule II controlled substances for many years. California PMP materials claim that the state began to maintain a central repository of "triplicates," forms with carbon copies, in 1939.[1] The pharmacy completed a form relating to each controlled substance dispensed, keeping one copy and forwarding one each to the prescriber and the state. Illinois began to keep its triplicate records in 1957, according to the Director of the state's PMP.[2] These records were created with carbon paper. Reporting was voluntary. Illinois moved its program from the State Police to a health-related agency in 1997, and it replaced carbon paper with an electronic database in 2000. Still, health care professionals rarely requested reports.

Other states also began to develop prescription monitoring databases, especially during the 1990s and early 2000s. Then, in 2005, Congress passed the National All Schedules Prescription Electronic Reporting Act (NASPER) (P.L. 109-60), which authorized federal funding for states to establish or upgrade prescription monitoring database programs. This legislation prompted states to apply for the funding and establish programs in accordance with the statute. Electronic PMPs grew rapidly between 2006 and 2011.

The NASPER legislation called for states to collect data from prescriptions for Class II, III, and IV controlled substances. It listed the data fields that should be reported, provided that reporting should be required at least as often as every seven days, encouraged states to make their systems interoperable with other systems, especially with contiguous states that already had PMPs, and promoted disclosures to practitioners or dispensers to prevent drug diversion.[3]

The momentum has continued since 2011. The District of Columbia passed PMDB legislation in December 2013;[4] it became effective in February 2014. New Hampshire's PMDB went "live" on October 16, 2014. Pennsylvania enacted the Achieving Better Care by Monitoring All Prescriptions (ABC-MAP) Act (SB 1180) on October 2, 2014.[5] As of February 9, 2015, only Missouri has no law authorizing a PMP.

Features of PMPs

Parent agency. Most states house their PMDBs in the Board of Pharmacy. California's Controlled Substance Utilization and Review Evaluation System (CURES) is housed in the state Department of Justice,[6] as are the programs in about five other states. A few are housed in agencies dedicated to alcohol and substance abuse.

Direct or indirect access. Most of the PMDBs either already have or are aiming for a system that allows prescribers and dispensers to access the database in "real time," while the customer waits. Instant access to the database usually is limited to prescribers and dispensers. Many states have specifically authorized prescribers and dispensers to designate delegates who may access the database for them. The practitioner or prescriber usually may obtain a patient's utilization record only for a specific current or prospective patient. Most state laws, however, allow prescribers to obtain a report of all the prescriptions that reporting dispensers have attributed to them.

Other entities may receive disclosures of the information in the database on written request. PMPs uniformly make information available to the licensing boards for pharmacists and prescribers, which, in addition to physicians, may include, for example, nurse practitioners, advance practice nurses, and physician assistants. Typically, the licensing board must request information about a particular licensee as part of an investigation that has already begun. However, some state laws, such as Montana's,[7] allow the licensing boards to designate staff members who may be granted access to the database for the purpose of an active investigation. The same statute requires law enforcement agencies to present an investigative subpoena.

Some state statutes provide explicitly that only prescribers and dispensers may have direct access to the database. Illinois provides for a stand-alone dispenser and prescriber inquiry system with read-only access to prescription information from the preceding 12 months.[8]

Wisconsin's regulations provide for direct access by practitioners, prescribers, and their delegates through accounts set up either directly with the board or through the hospital, pharmacy, or other location where they prescribe or dispense drugs; the board must have determined that the computer system at the facility or pharmacy is as secure as the PMDB's system.[9] In contrast, government agencies, prison health care providers, county medical examiners, and the staff of licensing agencies must request information and document their right to have it. Law enforcement agencies must present

a court order or other satisfactory evidence of their right to the information. All of these requesters must be given the minimum information necessary to meet the need.[10]

Access by law enforcement agencies. There is no consensus as to whether or to what extent law enforcement agencies should have access to information in the PMDB except that they should not be free to search randomly or at will. In some states, the threshold for access is not high. For example, in New Mexico, law enforcement agents may obtain information from the PMDB if they are engaged in an ongoing investigation of an individual in the enforcement of the drug laws.[11] The Illinois PMDB may release information to government attorneys or law enforcement agencies engaged in the prosecution or investigation of an offense involving a controlled substance if they "demonstrate in writing" that they have reason to believe that a violation of state or federal law involving controlled substances has occurred and that the information requested is reasonably related to the investigation.[12]

Some states require a subpoena before the information may be disclosed to a law enforcement agency. For example, Montana authorizes release of the information to a peace officer employed by a state, local, federal or tribal law enforcement agency on presentation of an investigative subpoena.[13] Other states, such as New Hampshire[14] and Oregon,[15] require a court order or, like Minnesota,[16] a search warrant signed by a judge.

In Virginia, PMDB information about a specific patient, dispenser, or prescriber may be disclosed to a law enforcement officer who has been through the state or county-approved drug diversion training program or has been designated by the chief enforcement officer of a local government or campus police department to conduct drug diversion investigations or to a federal law enforcement officer seeking information about a specific recipient, dispenser or prescriber for a specific investigation.[17]

Oregon has taken the position that the requirement of a court order or search warrant applies not only to state and local law enforcement agencies, but to the federal government as well. Furthermore, a federal district court in Oregon has ruled that the use of subpoenas under 21 USC § 876 by the DEA to obtain prescription histories of individual patients and prescribers violates the Fourth Amendment to the United States Constitution.[18]

In this case, the Oregon PMP sued for a declaratory judgment that the subpoenas were unlawful. The American Civil Liberties Union of Oregon (ACLU), four patients, and one physician who serves many hospice patients asked to intervene as plaintiffs. The court granted them leave, and denied the DEA's motion and granted the intervenors' motion for summary judgment. The court rejected the DEA's argument that the intervenors had no reasonable expectation of privacy in the medical information held by the PMP; it emphasized the highly personal nature of the information sought and what it would reveal about the patients. Two of the patients were prescribed large doses of testosterone, a Schedule III controlled substance, to treat gender identity disorder. Another was prescribed two Schedule II drugs to treat extreme pain caused by kidney stones, and the fourth took a Schedule IV drug to treat post-traumatic stress disorder and anxiety. Neither the patients nor the physicians had a choice about whether to keep the information about the prescribed drugs out of the PMDB; if the prescriptions were written and dispensed, the pharmacy was legally required to report them. Therefore, they could not have made a choice to allow the PMP, a third party, to have access to the information. The DEA's appeal of this ruling currently is pending in the U.S. Court of Appeals for the Ninth Circuit.

Some states require a subpoena, court order, or search warrant before they allow law enforcement access to the information in the PMDB.

Drugs subject to requirement. Nearly all electronic PMPs require reports of the dispensing of Schedule II, III, and IV controlled substances, although Iowa requires reporting only of Schedule II and designated drugs on Schedules III and IV.[19] Some also include Schedule V substances.[20] Other state laws allow the agency that operates the PMP to designate other "drugs of concern."[21] Tramadol is probably the drug most commonly so designated. Many of the states that list drugs of concern included tramadol on their lists. In July 2014, the DEA adopted a rule placing tramadol onto Schedule IV.[22]

Several states with laws that allow medical use of marijuana require that the dispensing of medical marijuana be tracked and reported.[23] Connecticut, for example, requires that the dispensing of medical marijuana be reported daily.[24]

Frequency of reporting. The original triplicate system involved monthly reporting. States that received NASPER funding were expected to require reporting at least every seven days, but the requirement could be excused if a state showed that weekly reporting was either not feasible or contrary to the best interests of public health in the state.[25] As of November 2014, only Alaska still requires reporting as infrequently as monthly. Colorado requires reports twice per month,[26] and Indiana requires that dispensation of a controlled substance be reported within 15 days.[27]

In recent years, states have begun to require more frequent reporting. For example, as of March 1, 2014,[28] New Jersey has directed pharmacies to report weekly rather than monthly. States that are beginning their programs for the first time are requiring more frequent reporting; for example, Pennsylvania requires reporting within 72 hours.[29] Several states that previously required weekly reporting have moved to reporting dispensation daily or within 24 hours. Others have allowed the state Board of Pharmacy to set the requirement. For example, the Illinois statute requires that reports be submitted within seven days of dispensing or more often if the Department of Human Services imposes the requirement through an administrative rule.[30] In 2012, Oklahoma amended its statute to require "real time" reporting.[31] An administrative rule requires submission of the report within five minutes.[32]

The Rights of Patients

State prescription monitoring laws may address the rights of patients to: (1) know that information about the controlled substances dispensed to them will be recorded and maintained by the state; (2) access the information that pertains to them; (3) know who has had access to the information; and (4) have inaccurate information corrected. Many state laws provide for patients to obtain a copy of their own PMDB records. The requirements that the patient must satisfy vary. Typically, the patient must provide identification.[33] Several states require the patient to appear in person at the office of the PMDB.[34] North Carolina, on the other hand, provides for access without going into detail either in the statute or regulations.[35]

A few states require that patients be notified that a dispenser will report the prescription to the PMDB. For example, Colorado law requires that both the prescriber and the dispenser inform the patient that the dispensing of the prescription will be reported to the database, where specified persons will have limited access to it.[36] The District of Columbia,[37] Minnesota,[38] and Oregon[39] have statutes that require the dispenser to provide conspicuous notice. Other states, including Kansas[40] impose the same requirement by regulation. Maryland[41] regulation requires that pharmacists and prescribers who intend to check the database for information either post a notice or give the patient written notice that the database may be checked. Rhode Island requires the prescriber to notify a patient of the database, the patient's right to access his or her own information, and contact information for the agency.[42] The Pennsylvania law, which becomes effective June 30, 2015, gives patients the right to review and correct their records at least once per year at no charge. Among the purposes cited for the law, Pennsylvania includes helping patients have accurate records of their medications in order to make more informed health care decisions.[43] Oregon, like a few other states, includes a process for a patient to seek correction of information about him or her in the database.[44]

Duty to Report and Immunity for Reporting

Consequences of failure to report. In nearly all states, the dispenser of a controlled substance subject to the monitoring program has a duty to report the dispensation to the PMDB. A willful failure to report violates state law. Typically, such a violation subjects the dispenser to discipline by the licensing board.[45] The statutes mention denial of renewal or revocation of the dispenser's license potential consequences or, occasionally, reprimand or imposition of conditions upon the license.[46]

Several state laws provide for fines or civil money penalties. For example, the Connecticut law provides for a fine up to $500.00;[47] the Illinois statute provides for penalties of $100 per day beginning on the date the report was due.[48]

In some states, intentional failure to transmit the required information after dispensing a controlled substance is a crime. Failure to report is a misdemeanor in Florida, Kentucky, and Oklahoma.[49] In Kansas, it is a "level 10 non-person felony,"[50] while in Georgia it is a felony punishable by up to five years in prison and a $50,000 fine.[51]

Immunity of PMDB agency. Nearly all state statutes provide that the pharmacy or pharmacist who reports dispensing a prescription is immune from liability for doing so. Several state statutes provide that the prescription monitoring program

or the agency is immune from liability for collection or disclosure of the information, whether or not the information disclosed is accurate or the disclosure is made to someone not authorized to receive the information. In Oregon, the immunity is not available if the person or agency acted with malice, criminal intent, gross negligence, recklessness, or willful intent.[52]

Consequences of unauthorized use or disclosure. A person who obtains or uses patient information from the PMDB without legal authorization is subject to administrative discipline by the professional licensing board, if applicable. A licensed professional may lose access to the database. Many states also provide for criminal penalties for unauthorized access, and a few impose civil money penalties or civil liability on the unauthorized user. For example, intentionally obtaining unauthorized access to the PMDB is a misdemeanor in the District of Columbia, Idaho, Kentucky, Tennessee, and Virginia. More states make it a felony, including Alabama, Hawaii, Kansas, Mississippi, Nevada, South Carolina, and South Dakota. Fines range from a minimum of $500 in West Virginia to $5,000 in several states. Mississippi has harsher penalties, i.e., up to $50,000 for knowingly obtaining PMP information for misuse or alteration of the information.[53] In Georgia, the first negligent, unauthorized use or disclosure of PMP information is a misdemeanor with a maximum penalty of $5,000. Subsequent violations are considered felonies. The knowing or intentional unauthorized use or disclosure of PMDB information is a felony punishable by up to three years imprisonment and a fine up to $50,000. If an individual attempts to obtain or actually obtains the information under false pretenses, the maximum sentence is five years and the maximum fine is $100,000. The use of PMDB information for profit, personal gain, or malicious purposes triggers a maximum fine of $250,000 and imprisonment for two to ten years.[54]

Requirements for prescribers to participate. There are two levels at which a state may require prescribers to participate in the PMP: registering for access to the database and actually consulting it. A majority of states do not require a prescriber either to register or to consult the database. Some specifically provide that a prescriber is not required to register with the PMP and may not be held liable for consulting or failing to consult the database or for acting or failing to act on the information.[55]

Increasingly, states are requiring prescribers to register for access to the online system so that they can check the database, even if they are not yet required to check. For example, Arizona has required prescribers to register since 2007.[56] Several states have amended their laws to require prescribers to register for access to the PMDB. A Connecticut law enacted in June 2013 required prescribers and dispensers to register with the PMP.[57] Delaware required registration as of January 1, 2014.[58] By mid-November 2014, four more states passed legislation requiring prescribers to register for access to the PMP: (1) Colorado;[59] (2) Idaho;[60] (3) Rhode Island;[61] and (4) Virginia.[62]

In addition, Maine[63] passed a law requiring the licensing boards to include registration for access to the PMDB as part of the renewal of each prescriber's license. Massachusetts added physician assistants and registered nurses to the list of prescribers who will be registered automatically upon issuance or renewal of their licenses.[64]

Increasingly, states require prescribers to register for access and to use the PMDB.

A growing number of states have made it easier for prescribers to check the system by explicitly allowing them to delegate the task to employees rather than doing it themselves.[65] Some states require that the delegate be a health care professional. Pennsylvania will require physicians to appoint licensed nurses if available. Frequently, the state law or regulation will require the delegate to have an individual account so that the agency may track all requests for access and trace unauthorized access to the system.

Requirements to access the database. A significant minority of states' PMP laws require prescribers to check the database in some circumstances. The degree of specificity or direction to prescribers varies considerably with the most directive statutes. The Arkansas statute encourages prescribers to access or check the database before prescribing, dispensing, or administering medications, and allows licensing boards to require prescribers to do so.[66] Massachusetts amended its statute in 2013 to direct the Department of Public Health (DPH), in conjunction with the licensing boards, to publish rules requiring prescribers to check the PMP database before prescribing a Schedule II or Schedule III controlled substance to a new patient.

Nebraska's Voluntary, Integrated System

Nebraska took a unique approach to the question of how to track prescriptions for controlled substances. Rather than establishing a PMDB, the state first elected to establish a statewide health information exchange, called NeHII, so that all major providers and payers could use a common database. It differs from the typical PMDB in the following ways:

- Patients and physicians may opt out of the record system.
- The law does not require reporting to a central repository when a controlled substance is dispensed. The providers or practitioners who participate in the system access the prescription drug information through NeHI's medication query functionality.
- The medication query functionality is maintained by Surescripts, a private pharmacy benefits administrator, which receives feeds from the national retail chains as well as prescription data from the plans it administers.

The Nebraska legislature enacted LB 237 in 2011. The law provides that the state Department of Health and Human Services must collaborate with the Nebraska Health Information Initiative (NeHII), a public-private statewide Health Information Exchange (HIE), to enhance or establish the technology to monitor the dispensing of controlled substances. The law specified that no state funding could be used to implement or operate the PMP, so the project became part of NeHII, which had the authority to apply for grants.[67] NeHII was one of the first projects funded by the Office of the National Coordinator for Health Information Technology (ONCHIT) through the HIE Cooperative grant funding that was made available in 2009.

Deb Bass, the Executive Director of NeHII, told Wolters Kluwer that physicians, pharmacists, and hospitals see the medication query as the most valuable functionality of the HIE. Those who focus most on preventing addiction to prescription drugs, however, were concerned that patients whose prescriptions need monitoring may choose to opt out of the system, defeating the purpose of the monitoring program. Therefore, a platform upgrade is planned for 2015 that will allow recording, reporting, and inquiry on the patients to whom prescribed controlled substances have been dispensed, and patients will not be permitted to opt out of this system. Patients who have opted out of NeHII will not have their medical records in NeHII, but they will be in the PMDB, which may be accessed separately. Bass said that it was now possible to migrate to the new platform because of funding that became available when the state legislature authorized the PMP to apply for grants.

California's 2014 Changes

Because of legislation passed in 2013, by January 1, 2016, all prescribers and pharmacists must register for online access to Controlled Substance Utilization Review and Evaluation System (CURES), the state's prescription monitoring program, housed in the state Department of Justice (DOJ) in the Office of the Attorney General. The DOJ must develop an online application system for practitioners and pharmacists to use, preferably, one that will mesh seamlessly with the licensing system.[68]

An additional $6 will be added to the fee that the regulated professionals must pay to renew their licenses; the fee will fund the CURES program. Unlike many other state PMDB laws, the California statutes provide for the imposition of administrative fines by the DOJ, subject to the right to a hearing. Any administrative fines collected also will go to fund the CURES program.

Interoperability and Information Sharing

As the number of PMPs has grown, states have increased their efforts to share information across state borders, especially with neighboring states. The NASPER legislation requires applicants to describe how they will provide for sharing information with any contiguous states that already have PMDB systems.[69] The interoperability of states' systems varies considerably, and there are several efforts to create or extend interoperability.

The National Association of Boards of Pharmacy (NABP) has established InterConnect®, which allows users registered in one state to check prescription data in any of the other participating states. As of January 28, 2015, 28 states are participating in InterConnect, and NABP expects the number to reach 30 by the end of the year. To join, the state agency must execute a Memorandum of Understanding with the NABP.

The two most commonly used contractors, Health Information Designs and Optimum Technology, have

functioning interface applications for states' PMP. Other contractors and state information technology departments may work with the NABP to develop or adapt the interface to function with InterConnect.[70]

Effectiveness of PMPs

States typically cite several purposes for the PMDB: (1) reducing doctor shopping; (2) reducing the abuse of opioids and other controlled substances; and (3) reducing overdoses of opioids and the resulting injuries and deaths. The achievement of these goals depends, in part, on aspects of the program. The Centers for Disease Control (CDC) and the Center of Excellence in Prescription Monitoring Database Programs at Brandeis University (Brandeis COE), among others, have studied the effects of states' implementation of changes to their PMPs, and the states have monitored the effects of their own policies.

In several states, adoption or strengthening of a PMP has been associated with reduction of emergency department admissions and deaths from overdose and in the number of prescriptions written and units dispensed. It appears that the most effective PMPs have one or more of certain features in common:

- mandatory reporting by dispensers;
- online access to patient histories in real time;
- mandatory registration of prescribers or unsolicited notice to prescribers when their patients' usage reaches a certain threshold; and
- support from stakeholders such as professional associations.

Randy D. Malan, R. Ph., Clinical Director of the Illinois Prescription Monitoring Program, told Wolters Kluwer that since the state began all-schedule reporting in 2008, the incidence rate of high usage users has dropped by two-thirds. Illinois classifies high usage as six prescribers and/or six pharmacies in a one-month period. Although prescribers are not required to register, written notifications are sent to all prescribers whose patients' usage is considered high. Malan said that previously unregistered prescribers usually register after they receive a notice. The Academy of Family Physicians, the Illinois Medical Society, and the Illinois Pharmacists Association all have begun continuing education programs to encourage safe prescribing and dispensing of controlled substances. In a CDC report ranking 2012 opioid prescribing practices among the states, Illinois ranked 43rd in the number of opioid pain relievers prescribed and 50th in the prescribing of long-acting and high-dosage opioids.[71]

The Brandeis COE has studied the effectiveness of PMPs using several measures, including reduction of overdoses and drug poisoning, improvement of clinical decision making, and prevention and detection of doctor shopping and drug diversion. It has found that prescribers who are notified that a patient has obtained multiple prescriptions and filled them at multiple pharmacies are likely to consider whether their treatment of the patient should change, and often, they will change the medication that they prescribe for the patient or refer him or her to counseling, a pain management clinic, or substance abuse treatment.[72]

The use of the PMDB should be integrated with physicians' work flow.

The Brandeis COE reports that other studies observed that the number of overdose-related deaths declined in Florida and Kentucky after the adoption of PMPs and increased regulation of pain management clinics or other measures. Increased use of the PMP in Oklahoma was associated with a decline in the number of overdose deaths, from 807 in 2011 to 578 in 2012. Earlier detection of doctor shopping after the adoption of PMPs has been tied to decreases in spending on unnecessary medications as Medicaid and private insurers with access to the data restricted clients to one pharmacy.

Improving the effectiveness of PMPs. One major obstacle to the use of PMPs is the interruption of health professionals' work flow. In order to access the PMDB, a prescriber or delegate often must log out of the practice's electronic health records (EHR) system, log into the PMDB, and then enter the patient's information. The *AAFP News* reported that Marty Allain, J.D., director of Indiana's program and senior manager of NARxCHECK for the National Association of Boards of Pharmacy, told the participants at the American Academy of Family Physicians state legislative conference that for every ten prescriptions written in Indiana, the state's database is checked only once. "I think it's because the provider doesn't have time to access the

site," he said. Still, even with the low participation rate, the number of patients with high numbers of prescriptions has dropped by 20 percent.

In six PMDB pilot projects sponsored by ONCHIT, participants who could access the PMDB information on a patient from the patient's EHR or from their electronic prescribing software changed their prescribing practices.[73] Physicians in offices and hospital emergency departments used the database and began to address the patients' underlying issues when potential abuse was apparent. One emergency department physician in Indiana reported that on a slow night, when there was time to access the system, the PMDB report showed that a patient had filled 27 prescriptions for opioids during June 2012. This led the physician to ask the patient directly about her opioid use. The patient ultimately admitted that she was addicted and was referred for appropriate treatment. The physician noted that if there had been patients waiting, there would not have been time to run the search, and the result would have been continued enabling of the patient's addiction. The physician urged that the data be made available directly through the hospital's system. Notably, after one month of the Indiana pilot, 58 percent of physicians reported that they had reduced the number of prescriptions they wrote or the number of pills to be dispensed.

Conclusion

Prescription drug monitoring programs can be an effective tool to reduce the incidence of drug addiction, overdoses, and deaths. To be effective, the data must be current, easy to access and understand, and actionable. The integration of PMDBs with providers' record systems and work flow is essential to assure that practitioners actually use the system.

ENDNOTES

1 See http://www.deadiversion.usdoj.gov/mtgs/pharm_awareness/conf_2013/august_2013/san_jose/farales.pdf
2 Illinois Board of Pharmacy Update, March 2013, http://www.ipha.org/ce/ces/2016-01-16-JNL.pdf.
3 42 U.S.C. § 280g–3, added by P.L. 109-60, Sec. 3.
4 D.C. Act 20-232.
5 Act No. 191 of 2014. Although Pennsylvania was listed among the states with existing PMDB programs, in fact, its database was quite small and its availability was limited to law enforcement. The state has not had an electronic database.
6 Cal. Health & Safety Code Sec. 11165.
7 Mont. Code Sec. 37-7-1506.
8 720 ILCS 570/318(j).
9 W.A.C. Phar. Rule 18.09.
10 W.A.C. Phar. Rule 18.11.
11 N.M.A.C. Sec. 16.19.29.9(E)(5).
12 720 ILCS 570/318.
13 Mont. Code Sec. 37-7-1506(1)(e).
14 N.H. Stat. Sec. 318-B:35(I)(b)(3).
15 Ore. Rev. Stat. Sec. 431.966(2)(a)(D).
16 Minn. Stat. Sec. 152.126(6)(b)(8).
17 Va. Code Sec. 54.1-2523(C)(1), as amended by Ch. 12, Laws of 2014.
18 *Oregon Prescription Drug Monitoring Program v. U.S. Drug Enforcement Administration,* D. Ore. No. 12-02023 (February 11, 2014).
19 Iowa Code Sec. 124.554(1)(g).
20 See, *e.g.*, Conn. G. L. sec. 21a-254;
21 See, *e.g.*, 16 Del. Code Sec. 4798(b)(8); Wis. Stat. Sec. 450.19(1)(ag).
22 *Final rule*, 79 FR 37623 (July 2, 2014, adding paragraph (3) to 21 C.F.R. sec. 1308.14(b).
23 See, *e.g.*, N.J. Stat. Sec. 45:1–45, which provides that the records shall serve the same purpose as the state's PMP.
24 Conn. Agencies Regs. Sec. 21a-408-50.
25 PHSA Sec. 399O(d)(1), added by P.L. 109-60, Sec. 3.
26 Colo. Bd. Pharm. Rule 23.00.30.
27 Ind. Code Sec. 35-48-7-8(2).
28 See http://www.njconsumeraffairs.gov/pmp/reporting.htm.
29 2014 Act 191, sec. 7.
30 720 ILCS 570/316.
31 Okla. Stat. Sec. 2-309C(B)(2).
32 Okla. Admin. Code Sec. 475:45-1-5.
33 See, *e.g.*, 3 Colo. Code of Regs. Sec. 719-1-2300.00.70(f).
34 See, *e.g.*, Wyo. CSA Rule, Ch. 8, Sec. 3(c); W.A.C. Phar. Rule 18.11.
35 N.C. Stat. Sec. 90-113.74(c)(2).
36 Colo. Rev. Stat. Sec. 12-402.5-403(2).
37 D.C. Code Sec. 48-853.05.
38 Minn. Stat. Sec. 152.126(4)(d).
39 Ore. Rev. Stat. Sec. 431.962(2)(g).
40 Kan. Adm. Reg. Sec. 68-21-4.
41 Md. Adm. Code Sec. 10.47.07.05
42 R.I. Gen. L. Sec. 21-28-3.32.
43 2014 Act 191 (SB 1180), Secs. 2, 8.
44 Ore. Rev. Stat. Sec. 431.966(2)(d).
45 See, *e.g.*, 18 Vt. Stat. Sec. 4283; Alaska Stat. Sec. 17.30.200(e); Me. Rev. Stat. Sec. 7251.
46 See Utah Code Sec. 58-37f-602.
47 Conn. Gen. L. Sec. 21A-255; 720 ILCS 570/316(a)(4).
48 720 ILCS 570/316(a)(4).
49 Fla. Stat. Sec. 893.005(10); Ky. Rev. Stat. Sec. 218A.202(11); Okla. Stat. Sec. 63-2-309C.
50 Kan. Stat. Sec. 65-1693(a).
51 Ga. Code Sec. 16-13-64.

[52] Ore. Rev. Stat. Sec. 431.966(6)
[53] Miss. Code Ann. Sec. 73-21-103(d).
[54] Ga. Code Sec. 16-13-64.
[55] See, *e.g.*, 16 Del. Code Sec. 4798.
[56] Ariz. Stat. Sec. 36-2606.
[57] P.A. 13-172, enacted June 21, 2013.
[58] 16 Del. Code Sec. 4798(u).
[59] HB 1283, signed by governor and effective May 21, 2014
[60] HB 396, signed by governor March 13, 2014, effective July 1, 2014.
[61] HB 7574, SB 2523, signed by governor and effective May 27, 2014.
[62] HB 1249, SB 294, signed by governor March 3 and 5, 2014, effective July 1, 2015.
[63] P.L. 2014, Ch. 587.
[64] Laws of 2014, Ch. 165.
[65] See, *e.g.*, Ariz. SB 1124, signed by governor April 22, 2014, effective July 24, 2014; Colo. HB 1283, signed by governor and effective May 21, 2014; R.I. HB 7574, SB 2523, signed by governor and effective May 27, 2014.
[66] Ark. Code Sec. 20-7-604.
[67] LB 237 was signed by the governor on April 14, 2011.
[68] Cal. B. & P. Code Sec. 209.
[69] 42 U.S.C. § 280g-3, added by P.L. 109-60, Sec. 3.
[70] http://www.bp.net/programs/pmp-interconnect/nabp-pmp-interconnect, accessed December 2, 2014.
[71] CDC, Morbidity and Mortality Weekly Report, Vol 63, pp. 563-568 (July 3, 2014), found at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6326a2.htm?s_cid=mm6326a2_w (accessed October 29, 2014).
[72] Briefing on PDMP Effectiveness, http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf (accessed October 29, 2014).
[73] *Enhancing Access to Prescription Drug Monitoring Programs Using Health Information Technology: Connecting Prescribers and Dispensers to PDMPs through Health IT* (2012), available at http://www.healthit.gov/sites/default/files/pdmp_pilot_studies_summary.pdf. (accessed December 2, 2014) .